

**WHAT IS CLAIMED IS:**

1. In the production of a porous body containing a fibrous apatite/collagen composite by gelating a dispersion comprising said fibrous apatite/collagen composite, collagen and water, freeze-drying the resultant gel to form a porous body, and cross-linking collagen in said porous body, a method for controlling the average pore diameter of said porous body by the solidification time of said gel in said freezing step.
- 5 2. The method for controlling the average pore diameter according to claim 1, wherein the solidification time of said gel is controlled by a temperature at which said gel is kept for freezing.
- 10 3. The method for controlling the average pore diameter according to claim 1 or 2, wherein the temperature for keeping said gel for freezing is -100°C to 0°C.